

Overhaul



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
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Canada

Tel (613) 632-5200  
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5159214

C60-OH

Job Sheet OH191614



Part No: C60-OH

Job Qty: 1 ea

Part Name: C-Series Remote Hook 6,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/5/19

Job Tracking No: RA616

Due Date: 4/16/19

Created By: Jennifer Renwick

Type: Rework - OH

Description: Orig batch# 6102 / Order# 14253

Note: DWG C60 Rev. 2 IPP Rev. B 18.04.19 new issue DP Verify DD

Ship Via:

Return <sup>W</sup> - order 14248

## Bill of Materials

## Job Routing

| Op No | Operation           | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |              | Sign-off |
|-------|---------------------|-------|------------|----------|-----------|---------|-----------------------|--------------|----------|
|       |                     |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time    |          |
| 110   | External Load - 1   | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.50    | External Load - 1     | 5159214      | gn       |
|       |                     |       |            |          |           |         | External Load - 2     |              |          |
|       |                     |       |            |          |           |         | External Load - 3     |              |          |
| 120   | QC                  | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.00    | QC5                   |              |          |
| 130   | Customer Acceptance | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.00    |                       | See attached |          |
| 140   | Outsource           | 1 pcs | 4/16/19    | 4/16/19  |           |         | SKY002-VC             | 5            |          |
| 145   | Outsource           | 1 pcs | 4/16/19    | 4/16/19  |           |         | GRO002-VC             | 10           |          |
| 150   | Packaging           | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.00    | Packaging2            |              |          |
| 160   | QC                  | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.00    | QC6                   |              |          |
| 170   | Small Fab           | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 1.00    | Small Fab-9           |              |          |
| 180   | QC                  | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.00    | QC5                   |              |          |
| 190   | Packaging           | 1 pcs | 4/16/19    | 4/16/19  | 0.00      | 0.00    | Packaging3-2          |              |          |
| 200   | QC21-FG             | 1 Ea  | 4/16/19    | 4/16/19  | 0.00      | 0.00    | QC21                  |              |          |

MAR 13 2019

DAS

70

9-89

Part Op 110 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.  
Descriptions: 170 - RE-ASSEMBLE. TEST ASSEMBLY.

## Job BOM

| Part / Item       | Component Name                               | Quantity     | Operation             | Container |
|-------------------|----------------------------------------------|--------------|-----------------------|-----------|
| C60-AR            | C-Series Remote Hook 6,000 lbs Lift Capacity | 1 pcs (1 ea) | 110-External Load - 1 | 5159089   |
| 188-FSCS-1032-5/8 | Set Screw                                    | 4 Ea (4 ea)  | 170-Small Fab         |           |
| 2595K2            | Heat Shrink                                  | 1 ft (1 ea)  | 170-Small Fab         |           |
| 32448             | 16-14 AWG Knife Connector                    | 2 Ea (2 ea)  | 170-Small Fab         |           |
| 600.1309          | CANAM Plate ID Label                         | 1 pcs (1 ea) | 170-Small Fab         |           |
| 600.1309-A        | Label                                        | 1 pcs (1 ea) | 170-Small Fab         |           |
| 600.1312          | Caution Sticker                              | 1 pcs (1 ea) | 170-Small Fab         |           |
| AN4-23A           | Bolt                                         | 2 Ea (2 ea)  | 170-Small Fab         |           |
| AN5-21A           | Bolt                                         | 4 Ea (4 ea)  | 170-Small Fab         |           |
| C10-41            | Strain Relief Connector                      | 1 Ea (1 ea)  | 170-Small Fab         |           |
| C2-14-2           | Label Rivets                                 | 2 Ea (2 ea)  | 170-Small Fab         |           |
| C45-1-1           | Manual Knob Release                          | 1 pcs (1 ea) | 170-Small Fab         |           |
| C45-10-1          | Lock Spring Pin                              | 1 Ea (1 ea)  | 170-Small Fab         |           |
| C45-11-2          | Locating Pin                                 | 2 Ea (2 ea)  | 170-Small Fab         |           |

Plex 3/5/19 12:40 PM Dart.Renwick.Jennifer

|               |                                       |              |               |
|---------------|---------------------------------------|--------------|---------------|
| C45-12-1      | Lock Bushing                          | 2 pcs (2 ea) | 170-Small Fab |
| C45-12-2      | Lock Shaft                            | 1 pcs (1 ea) | 170-Small Fab |
| C45-12-4      | Lock Roller                           | 1 pcs (1 ea) | 170-Small Fab |
| C45-12-5      | Lock Roller Pin                       | 1 pcs (1 ea) | 170-Small Fab |
| C45-12-6      | Retaining Ring                        | 2 Ea (2 ea)  | 170-Small Fab |
| C45-13-1      | Keeper Bushing                        | 2 pcs (2 ea) | 170-Small Fab |
| C45-13-2      | Teflon Keeper, Spacer                 | 2 Ea (2 ea)  | 170-Small Fab |
| C45-13-3      | Keeper Shaft                          | 1 Ea (1 ea)  | 170-Small Fab |
| C45-13-4      | Keeper                                | 1 pcs (1 ea) | 170-Small Fab |
| C45-13-5      | Keeper Spring                         | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-11      | Actuator                              | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-12      | Latch Roller Bearing                  | 1 Ea (1 ea)  | 170-Small Fab |
| C45-3-2       | Latch Roller Pin                      | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-2-1     | Snap Ring                             | 2 Ea (2 ea)  | 170-Small Fab |
| C45-3-3       | Latch Roller                          | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-4       | Pin                                   | 2 pcs (2 ea) | 170-Small Fab |
| C45-3-4-1     | Retaining Ring                        | 4 Ea (4 ea)  | 170-Small Fab |
| C45-3-5       | Teflon Spacer                         | 2 Ea (2 ea)  | 170-Small Fab |
| C45-3-6       | Latch                                 | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-7       | Link                                  | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-8A      | Actuator Shaft Bushing                | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-8B      | Actuator Shaft Bushing                | 1 pcs (1 ea) | 170-Small Fab |
| C45-3-9       | Lever Spring                          | 1 pcs (1 ea) | 170-Small Fab |
| C45-4-1       | Trunnion Bushing                      | 2 pcs (2 ea) | 170-Small Fab |
| C45-4-4A      | C45 Load Beam Assembly                | 1 pcs (1 ea) | 170-Small Fab |
| C45-4-5       | Loadbeam Spacer                       | 1 pcs (1 ea) | 170-Small Fab |
| C45-5-1       | Lever Stop Pin                        | 1 Ea (1 ea)  | 170-Small Fab |
| C45-5-2       | Lever Stop                            | 1 pcs (1 ea) | 170-Small Fab |
| C45-7-1       | LOADBEAM BUMPER                       | 1 pcs (1 ea) | 170-Small Fab |
| C45-7-2       | Lock Bumper                           | 2 pcs (2 ea) | 170-Small Fab |
| C45-8-1-2     | Solenoid Nut                          | 2 pcs (2 ea) | 170-Small Fab |
| C45-8-2       | Solenoid                              | 1 pcs (1 ea) | 170-Small Fab |
| C45-8-4       | Solenoid Cover Gasket                 | 1 pcs (1 ea) | 170-Small Fab |
| C45-8-5       | Solenoid Cover                        | 1 pcs (1 ea) | 170-Small Fab |
| C45-9-1       | Clock Spring Cover                    | 1 pcs (1 ea) | 170-Small Fab |
| C45-9-2       | Clock Spring                          | 1 pcs (1 ea) | 170-Small Fab |
| C60-10-2      | Lock Spring                           | 1 pcs (1 ea) | 170-Small Fab |
| C60-11-1      | Side Plate Solenoid                   | 1 pcs (1 ea) | 170-Small Fab |
| C60-12-3      | Lock                                  | 1 pcs (1 ea) | 170-Small Fab |
| C60-2-1       | Side Plate                            | 1 pcs (1 ea) | 170-Small Fab |
| C60-3-1       | Radial Bearing                        | 2 Ea (2 ea)  | 170-Small Fab |
| C60-3-10      | Latch Shaft                           | 1 pcs (1 ea) | 170-Small Fab |
| EL-PLUG-M     | 3-Prong Male Spade Plug               | 1 Ea (1 ea)  | 170-Small Fab |
| EL314-SJTOW   | Long Line Electrical Wire, 14/3 Gauge | 1 ft (1 ea)  | 170-Small Fab |
| MS21044N5     | Nut                                   | 4 Ea (4 ea)  | 170-Small Fab |
| MS27039-4-08  | Screw                                 | 1 Ea (1 ea)  | 170-Small Fab |
| NAS1149F0463P | Washer                                | 3 Ea (3 ea)  | 170-Small Fab |
| NAS1149F0563P | Washer                                | 8 Ea (8 ea)  | 170-Small Fab |



## Job Allocations

| Operation             | Component Part    | Required | Inventory | Allocated |
|-----------------------|-------------------|----------|-----------|-----------|
| 110-External Load - 1 | C60               | 1        | 0         | 0         |
| 170-Small Fab         | 188-FSCS-1032-5/8 | 4        | 118       | 0         |
|                       | 2595K2            | 1        | 19        | 0         |
|                       | 32448             | 2        | 223       | 0         |
|                       | 600.1309          | 1        | 0         | 0         |
|                       | 600.1309-A        | 1        | 97        | 0         |
|                       | 600.1312          | 1        | 19        | 0         |
|                       | AN4-23A           | 2        | 694       | 0         |
|                       | AN5-21A           | 4        | 372       | 0         |
|                       | C10-41            | 1        | 30        | 0         |
|                       | C2-14-2           | 2        | 190       | 0         |
|                       | C45-1-1           | 1        | 9         | 0         |
|                       | C45-10-1          | 1        | 162       | 0         |
|                       | C45-11-2          | 2        | 47        | 0         |
|                       | C45-12-1          | 2        | 19        | 0         |
|                       | C45-12-2          | 1        | 7         | 0         |
|                       | C45-12-4          | 1        | 21        | 0         |
|                       | C45-12-5          | 1        | 49        | 0         |
|                       | C45-12-6          | 2        | 114       | 0         |
|                       | C45-13-1          | 2        | 0         | 0         |
|                       | C45-13-2          | 2        | 70        | 0         |
|                       | C45-13-3          | 1        | 10        | 0         |
|                       | C45-13-4          | 1        | 0         | 0         |
|                       | C45-13-5          | 1        | 0         | 0         |
|                       | C45-3-11          | 1        | 7         | 0         |
|                       | C45-3-12          | 1        | 88        | 0         |
|                       | C45-3-2           | 1        | 0         | 0         |
|                       | C45-3-2-1         | 2        | 93        | 0         |
|                       | C45-3-3           | 1        | 27        | 0         |
|                       | C45-3-4           | 2        | 64        | 0         |
|                       | C45-3-4-1         | 4        | 173       | 0         |
|                       | C45-3-5           | 2        | 99        | 0         |
|                       | C45-3-6           | 1        | 6         | 0         |
|                       | C45-3-7           | 1        | 0         | 0         |
|                       | C45-3-8A          | 1        | 32        | 0         |
|                       | C45-3-8B          | 1        | 7         | 0         |
|                       | C45-3-9           | 1        | 31        | 0         |
|                       | C45-4-1           | 2        | 20        | 0         |
|                       | C45-4-4A          | 1        | 6         | 0         |
|                       | C45-4-5           | 1        | 6         | 0         |
|                       | C45-5-1           | 1        | 46        | 0         |
|                       | C45-5-2           | 1        | 0         | 0         |
|                       | C45-7-1           | 1        | 19        | 0         |
|                       | C45-7-2           | 2        | 8         | 0         |
|                       | C45-8-1-2         | 2        | 4         | 0         |
|                       | C45-8-2           | 1        | 8         | 0         |
|                       | C45-8-4           | 1        | 11        | 0         |
|                       | C45-8-5           | 1        | 21        | 0         |
|                       | C45-9-1           | 1        | 0         | 0         |
|                       | C45-9-2           | 1        | 45        | 0         |
|                       | C60-10-2          | 1        | 42        | 0         |
|                       | C60-11-1          | 1        | 0         | 0         |
|                       | C60-12-3          | 1        | 0         | 0         |
|                       | C60-2-1           | 1        | 0         | 0         |
|                       | C60-3-1           | 2        | 64        | 0         |
|                       | C60-3-10          | 1        | 0         | 0         |
|                       | EL-PLUG-M         | 1        | 36        | 0         |
|                       | EL314-SJTOW       | 1        | 720       | 0         |
|                       | MS21044N5         | 4        | 97        | 0         |
|                       | MS27039-4-08      | 1        | 231       | 0         |
|                       | NAS1149F0463P     | 3        | 585       | 0         |
|                       | NAS1149F0563P     | 8        | 449       | 0         |

## Part Specifications

Specifications could not be found.

## Inspection Sheet Complete RA616

Customer QA Ref #

0

| Part Number | Original Batch /<br>Serial # / Ctrl # | Original<br>Revision # | Quantity | Part Complete                           | Rev/CHG Current              | New Paperwork                | New Labels                   | Disposition       | Original<br>Container # | New<br>(Receiving)<br>Serial # | New Job # | Work order instructions |
|-------------|---------------------------------------|------------------------|----------|-----------------------------------------|------------------------------|------------------------------|------------------------------|-------------------|-------------------------|--------------------------------|-----------|-------------------------|
| C60         | 6102                                  |                        | 1        | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | CUSTOMER SUPPLIED |                         | S159089                        | OH191614  | Overhaul                |
| C60         | 6129                                  |                        | 1        | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | CUSTOMER SUPPLIED |                         | S159090                        | OH191622  | Overhaul                |
| 0           |                                       |                        | 0        | <input type="checkbox"/> Yes            | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes |                   |                         |                                |           |                         |
| 0           |                                       |                        | 0        | <input type="checkbox"/> Yes            | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes |                   |                         |                                |           |                         |
| 0           |                                       |                        | 0        | <input type="checkbox"/> Yes            | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes |                   |                         |                                |           |                         |
| 0           |                                       |                        | 0        | <input type="checkbox"/> Yes            | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes |                   |                         |                                |           |                         |

QC Approval: \_\_\_\_\_ 0

Date: 0-Jan-00 \_\_\_\_\_

Special Return/Rework Instructions:

## Jennifer Renwick

---

**From:** Jerry Sullivan <sullivanj@htshelicopters.com>  
**Sent:** Wednesday, March 13, 2019 10:57 AM  
**To:** Caitlin Crooks  
**Cc:** Support Eugene  
**Subject:** RE: C-60 Cargo hook- RA616

Hello Caitlin,

I am not sure how they change. That is fine. We do not scrap any parts, we can wait until the other hook is done

Thanks!

Jerry Sullivan ext 112  
Helicopter Transport Services, LLC  
14497 Keil Road NE  
Aurora, OR 97002  
Ph: 503-776-9300  
Fax: 503-776-9305  
<http://www.htshelicopters.com/home.php>

**From:** Caitlin Crooks [mailto:[ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)]  
**Sent:** Tuesday, March 12, 2019 7:42 AM  
**To:** Jerry Sullivan <[sullivanj@htshelicopters.com](mailto:sullivanj@htshelicopters.com)>  
**Cc:** Support Eugene <[support.or@dartaero.com](mailto:support.or@dartaero.com)>  
**Subject:** RE: C-60 Cargo hook- RA616

Hi Jerry

We have received back the C60 hooks, and the one with S/N 6102, we will be unable to overhaul. The interior is a different configuration and we cannot overhaul that type of configuration.

With that said, we have two options, we can either scrap on site, or we can hold on to it and ship it back when we ship the other C60 hook back (once that overhaul is complete).

Please let me know which option you would prefer.

If there are any questions, do not hesitate to ask.

Thank you,  
Caitlin

**CAITLIN CROOKS**  
*Inside Sales Representative*

**DART AEROSPACE**  
**T** 1 613 632-3336 > 289  
**F** 1 613 632-4443  
**M** 1 613 306-0596  
**E** [ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)

1 800 556- 4166

[www.dartaerospace.com](http://www.dartaerospace.com)

For technical support, click [here](#).

To access technical documentation, create your account [here](#).



**From:** Jerry Sullivan <[sullivanj@htshelicopters.com](mailto:sullivanj@htshelicopters.com)>

**Sent:** Tuesday, March 05, 2019 12:44 PM

**To:** Caitlin Crooks <[ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)>

**Subject:** RE: C-60 Cargo hook- RA616

Your form is attached

Thank you very much!

Jerry Sullivan ext 112  
Helicopter Transport Services, LLC  
14497 Keil Road NE  
Aurora, OR 97002  
Ph: 503-776-9300  
Fax: 503-776-9305  
<http://www.htshelicopters.com/home.php>

**From:** Caitlin Crooks [mailto:[ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)]

**Sent:** Tuesday, March 5, 2019 9:40 AM

**To:** Jerry Sullivan <[sullivanj@htshelicopters.com](mailto:sullivanj@htshelicopters.com)>

**Subject:** RE: C-60 Cargo hook- RA616

Thanks for sending this along!

The hooks are with our team to start the process.

Kind Regards,  
Caitlin

#### CAITLIN CROOKS

*Inside Sales Representative*

#### DART AEROSPACE

**T** 1 613 632-3336 > 289

**F** 1 613 632-4443

**M** 1 613 306-0596

**E** [ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)

**1 800 556- 4166**

[www.dartaerospace.com](http://www.dartaerospace.com)

For technical support, click [here](#).

To access technical documentation, create your account [here](#).



**From:** Jerry Sullivan <[sullivanj@htshelicopters.com](mailto:sullivanj@htshelicopters.com)>  
**Sent:** Tuesday, March 05, 2019 12:32 PM  
**To:** Caitlin Crooks <[ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)>  
**Subject:** RE: C-60 Cargo hook- RA616

I have attached the repair orders, I will sign and scan the end user form also.

I do appreciate the help!

Jerry Sullivan ext 112  
Helicopter Transport Services, LLC  
14497 Keil Road NE  
Aurora, OR 97002  
Ph: 503-776-9300  
Fax: 503-776-9305  
<http://www.htshelicopters.com/home.php>

**From:** Caitlin Crooks [mailto:[ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)]  
**Sent:** Tuesday, March 5, 2019 9:27 AM  
**To:** Jerry Sullivan <[sullivanj@htshelicopters.com](mailto:sullivanj@htshelicopters.com)>  
**Subject:** RE: C-60 Cargo hook- RA616

Hi Jerry

Sorry, I will track them down, it goes through a few different departments before I am notified so I don't also get told about the papers within the box.

If you require further information, please let me know and I will be happy to assist.

Kind Regards,  
Caitlin

**CAITLIN CROOKS**  
*Inside Sales Representative*

**DART AEROSPACE**  
**T** 1 613 632-3336 > 289  
**F** 1 613 632-4443  
**M** 1 613 306-0596  
**E** [ccrooks@dartaero.com](mailto:ccrooks@dartaero.com)  
**1 800 556- 4166**  
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